

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- REVISED

PERMITTEE

Bag Makers, Inc.
Attn: Jeremy Bayness
6606 South Union Road
Union, Illinois 60180

<u>Application No.:</u> 03070014	<u>I.D. No.:</u> 111804AAD
<u>Applicant's Designation:</u>	<u>Date Received:</u> August 19, 2013
<u>Subject:</u> Packaging Printing Plant	
<u>Date Issued:</u> December 18, 2014	<u>Expiration Date:</u> June 5, 2022
<u>Location:</u> 6606 South Union Road, Union, McHenry County	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of twenty-one (21) flexographic printing presses controlled by regenerative thermal oxidizer (RTO), thirty-three (33) silk screen printing presses, hot stamp printing process, transferable image (Color Vista) production process comprised of adhesive powder application to silkscreen printed image, and natural gas fired heaters and dryers pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
- i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 10 tons/year for any single Hazardous Air Pollutant (HAP) and 25 tons/year for any combination of such HAPs). As a result the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - ii. To limit the emissions of VOM from the construction of new emission units and other modifications at the source, which occurred without first obtaining construction permit(s) between November 15, 1992 and June 15, 2005 (the period during which the Chicago area was classified as severe nonattainment for ozone), to less than 25 tons/year. As a result, the source is excluded from the requirements of 35 Ill. Adm. Code Part 203, Major Stationary Sources Construction and Modification.
 - iii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirements of 35 Ill. Adm. Code Part 205 (Emission Reduction Market System). The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

- iv. To establish federally enforceable production and operating limitations, which restrict the maximum theoretical emissions of the flexographic printing presses to less than 90.7 Mg (100 tons) of VOM per calendar year in the absence of air pollution control equipment and the potential to emit for VOM from the flexographic printing presses to less than 22.7 Mg (25 tons) per year, so that the flexographic printing presses at this source are not subject to the requirements of 35 Ill. Adm. Code 218.401 (Flexographic and Rotogravure Printing).
 - b. Prior to initial issuance, a draft of this permit has undergone a public notice and comment period.
 - c. This permit supersedes all operating permit(s) for this location.
- 2a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
3. Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.
- 4a. Pursuant to 35 Ill. Adm. Code 218.187(a)(1), on and after January 1, 2012, except as provided in 35 Ill. Adm. Code 218.187(a)(2), the requirements of 35 Ill. Adm. Code 218.187 shall apply to all cleaning operations that use organic materials at sources that emit a total of 226.8 kg per calendar month (500 lbs per calendar month) or more of VOM, in the absence of air pollution control equipment, from cleaning operations at the source other than cleaning operations identified in 35 Ill. Adm. Code 218.187(a)(2). For purposes of 35 Ill. Adm. Code 218.187, "cleaning operation" means the process of cleaning products, product components, tools, equipment, or general work areas during production, repair, maintenance, or servicing, including but not limited to spray gun cleaning, spray booth cleaning, large and small manufactured components cleaning, parts cleaning, equipment cleaning, line cleaning, floor cleaning, and tank cleaning, at sources with emission units;

- b. Pursuant to 35 Ill. Adm. Code 218.187(b), no owner or operator of a source subject to 35 Ill. Adm. Code 218.187, other than manufacturers of coatings, inks, adhesives, or resins, shall perform any cleaning operation subject to 35 Ill. Adm. Code 218.187 unless the owner or operator meets the requirements in 35 Ill. Adm. Code 218.187(b)(1), (b)(2), or (b)(3). No owner or operator of a source that manufactures coatings, inks, adhesives, or resins shall perform any cleaning operation subject to 35 Ill. Adm. Code 218.187 unless the owner or operator meets the requirements in at least one of the following subsections: 35 Ill. Adm. Code 218.187(b)(1), (b)(2), (b)(3), (b)(4), or (b)(5).

- i. The VOM content of the as-used cleaning solutions does not exceed the following emissions limitations:

Cleaning of ink application equipment:

	kg/l	lb/gal
Screen printing, including screen reclamation activities	0.5	4.2

- ii. The VOM composite vapor pressure of each as-used cleaning solution used does not exceed 8.0 mmHg measured at 20°C (68°F);

- c. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G (Use of Organic Material) shall apply only to photochemically reactive material.

- d. Pursuant to 35 Ill. Adm. Code 218.402(b), the limitations of 35 Ill. Adm. Code 218.401(d) shall apply to all owners or operators of flexographic or rotogravure printing lines that print flexible packaging, or that print flexible packaging and non-flexible packaging on the same line, at a source where the combined emissions of VOM from all flexographic and rotogravure printing lines total 6.8 kg/day (15 lbs/day) or more (including solvents used for cleanup operations associated with flexographic and rotogravure printing lines), in the absence of air pollution control equipment.

- 5a. This permit is issued based upon the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Printing and Publishing Industry, 40 CFR 63, Subpart KK. The flexographic printing presses operated at the facility are not wide-web flexographic printing presses, as defined in 40 CFR 63.822(a).

- b. This permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ. Pursuant to 40

CFR 63.3300(c), web coating lines in lithography, screen-printing, letterpress, and narrow-web flexographic printing processes are not part of the affected source under 40 CFR 63 Subpart JJJJ.

- 6a. Pursuant to 35 Ill. Adm. Code 218.187(a)(2)(B)(i), notwithstanding 35 Ill. Adm. Code 218.187(a)(1):
- i. The following cleaning operations shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (e), (f), and (g):
 - A. Janitorial cleaning;
 - B. Stripping of cured coatings, inks, or adhesives, including screen reclamation activities;
 - C. Cleaning operations in printing pre-press areas, including the cleaning of film processors, color scanners, plate processors, film cleaning, and plate cleaning;
 - ii. Cleaning operations for emission units within the following source categories shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (d), (e), (f), and (g):
 - A. Flexible package printing;
 - B. Paper, film, and foil coating;
 - iii. The cleaning of metering rollers, dampening rollers, and printing plates shall be exempt from the requirements of 35 Ill. Adm. Code 218.187(b), (c), (f), and (g).
- b. Pursuant to 35 Ill. Adm. Code 218.204(c)(3), the paper coating limitation set forth in 35 Ill. Adm. Code 218.204(c) shall not apply to any owner or operator of any paper coating line on which flexographic, rotogravure, lithographic, or letterpress printing is performed if the paper coating line complies with the applicable emissions limitations in 35 Ill. Adm. Code Part 218 Subpart H (Printing and Publishing). In addition, screen printing on paper is not regulated as paper coating, but is regulated under 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). On and after May 1, 2011, the paper coating limitation shall also not apply to coating performed on or in-line with any digital printing press, or to size presses and on-machine coaters on papermaking machines applying sizing or water-based clays.
- c. This permit is issued based upon the flexographic printing presses at this source not being subject to the control requirements of 35 Ill. Adm. Code 218.401 (Flexographic and Rotogravure Printing). This is a result of the federally enforceable production and operating limitations of this permit, which restrict the maximum theoretical emissions of VOM to less than 100 tons per year and the potential to emit for VOM emissions to less than 25 tons per year. Pursuant to 35

Ill. Adm. Code 218.402(a), except as otherwise provided in 35 Ill. Adm. Code 218.401, the limitations of 35 Ill. Adm. Code 218.401 apply to all flexographic and rotogravure printing lines at a subject source. Sources with flexographic and/or rotogravure printing lines are subject sources if:

- i. Total maximum theoretical emissions of VOM from all flexographic and rotogravure printing lines (including solvents used for cleanup operations associated with flexographic and rotogravure printing lines) at the source ever exceed 90.7 Mg (100 tons) per calendar year and the flexographic and rotogravure printing lines (including solvents used for cleanup operations associated with flexographic and rotogravure printing lines) at the source are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision; or
 - ii. The flexographic and rotogravure printing lines (including solvents used for cleanup operations associated with flexographic and rotogravure printing lines) at the source have a potential to emit 22.7 Mg (25 tons) or more of VOM per year.
- d. This permit is issued based on the Color Vista production process not being subject to the control requirements of 35 Ill. Adm. Code 218 Subpart JJ (Miscellaneous Industrial Adhesives). Pursuant to 35 Ill. Adm. Code 218.900(a), the requirements of 35 Ill. Adm. Code 218 Subpart JJ shall apply to miscellaneous industrial adhesive application operations at sources where the total actual VOM emissions from all such operations, including related cleaning activities, equal or exceed 6.8 kg/day (15 lbs/day), calculated in accordance with 218.904(a)(1)(B), in the absence of air pollution control equipment.
- e. This permit is issued based on the silk screen printing presses, hot stamp printing process and Color Vista process not being subject to the control requirements of 35 Ill. Adm. Code 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(b)(1)(A), a source is subject to 35 Ill. Adm. Code 218 Subpart TT if it has the potential to emit 22.7 Mg (25 tons) or more of VOM per year, in aggregate, from emission units, other than furnaces at glass container manufacturing sources and VOM leaks from components, that are not regulated by 35 Ill. Adm. Code 218 Subparts B, E, F, H, Q, R, S, T, (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z, or BB.
- 7a. Pursuant to 35 Ill. Adm. Code 218.187(c), the owner or operator of a subject source shall demonstrate compliance with 35 Ill. Adm. Code 218.187 by using the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.187(g) and by complying with the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.187(e).
- b. Pursuant to 35 Ill. Adm. Code 218.187(d), the owner or operator of a source subject to the requirements of 35 Ill. Adm. Code 218.187 shall

comply with the following for each subject cleaning operation. Such requirements are in addition to work practices set forth in 35 Ill. Adm. Code 218.187(b)(4) and (b)(5), as applicable:

- i. Cover open containers and properly cover and store applicators used to apply cleaning solvents;
 - ii. Minimize air circulation around the cleaning operation;
 - iii. Dispose of all used cleaning solutions, cleaning towels, and applicators used to apply cleaning solvents in closed containers;
 - iv. Utilize equipment practices that minimize emissions; and
- c. Pursuant to 35 Ill. Adm. Code 218.401(d), no owner or operator of subject flexographic or rotogravure printing lines that print flexible packaging or print flexible packaging and non-flexible packaging on the same line shall cause or allow VOM containing cleaning materials, including used cleaning towels, associated with the subject flexographic or rotogravure printing lines to be kept, stored, or disposed of in any manner other than in closed containers, or conveyed from one location to another in any manner other than in closed containers or pipes, except when specifically in use.
- d. Pursuant to 35 Ill. Adm. Code 218.402(e), any owner or operator of any flexographic or rotogravure printing line that is exempt from any of the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402 is subject to the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.404(b) and (f), as applicable.
- 8a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the regenerative thermal oxidizer (RTO) such that the regenerative thermal oxidizer (RTO) is kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.
- c. The regenerative thermal oxidizer (RTO) shall be equipped with continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device. The continuous monitoring equipment must monitor for each afterburner the combustion chamber temperature of each afterburner.
- d. The Permittee shall install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on

the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or $\pm 0.5^{\circ}\text{C}$, whichever is greater.

- e. The afterburner's combustion chamber shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400°F in the absence of a compliance test. This temperature shall be maintained during operation.
 - f. The heaters, dryers, and the regenerative thermal oxidizer (RTO) shall only be operated with natural gas as the fuel. The use of any other fuel in the heaters, dryers, or the regenerative thermal oxidizer (RTO) requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
- 9a. Operation of and emissions from the flexographic printing presses shall not exceed the following limits:

<u>Material</u>	<u>VOM Usage</u>		<u>VOM Control</u>	<u>VOM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>Efficiency</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Solvent-Based Inks	0.6	6.0	80.0%	0.12	1.2
Water-Based Inks	0.16	1.6	0	0.16	1.6
Cleaning Solvents	5.6	56.0	80.0%	<u>1.12</u>	<u>11.2</u>
			Totals:	1.40	14.0

These limits are based on the maximum ink, coating, and solvent usage and operating permanent total enclosure and afterburner manufacturer's guaranteed 80% destruction efficiency. The above limits restrict both the maximum theoretical emissions of VOM to less than 100 tons/year and the potential to emit for VOM to less than 25 tons/year such that the emissions from flexographic printing presses at this source do not trigger the control requirements of 35 Ill. Adm. Code 218.401.

- b. Emissions from silk screen printing presses shall not exceed the following limits:

<u>Material</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Inks	0.23	2.32	0.23	2.32
Cleaning Solvents	0.65	6.42	0.65	6.42

These limits are based on the maximum VOM usage and emissions. Note that there is a "nested" limit on the emissions of the combination of HAPs as a result of the limit on VOM emissions. The HAPs emitted at this source have been determined to be VOMs and therefore limiting VOM emissions also limits HAP emissions.

- c. VOM and HAP emissions from the facility's operations shall be determined from the following equation:

$$E = [\Sigma(M_i \times C_i) - W \times C_w](1 - CE)$$

where:

E = VOM or HAP emissions (tons);

M_i = Raw material usage (tons);

C_i = VOM or HAP content of the raw material ((% by weight);

W = Certified amount of waste shipped-off (tons);

C_w = Certified VOM or HAP content of the waste (% by weight).

CE = RTO Control Efficiency, where applicable;

= 0.8 when RTO is running, CE = 0 when RTO is off.

- d. This permit is issued based on negligible emissions of volatile organic material (VOM) from the hot stamp printing and transferable image process. For this purpose VOM emission from each process shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- e. This permit is issued based on negligible emissions of particulate matter (PM) from the transferable image process. For this purpose PM emission shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- f. Operations and emissions from the natural gas-fired heaters, dryers and the regenerative thermal oxidizer (RTO) shall not exceed the following limits:
 - i. Natural Gas Usage: 32 mmscf/month, 162 mmscf/year
 - ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor	Emissions	
	(lbs/10 ⁶ scf)	(Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	84	1.35	6.81
Nitrogen Oxides (NO _x)	100	1.60	8.10
Particulate Matter (PM)	7.6	0.13	0.62
Sulfur Dioxide (SO ₂)	0.6	0.01	0.05
Volatile Organic Material (VOM)	5.5	0.09	0.45

These limits are based on the maximum firing rate and standard emission factors (Tables 1.4-1, 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- g. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from the source shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 tons/year of any combination of such HAPs. As a result of this

condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirements of Section 112(g) of the Clean Air Act and the NESHAP for Paper and Other Web Coating, 40 CFR 63 Subpart JJJJ.

- h. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 10a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
 - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Conditions 11 and 12 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 11. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

- 12a. Pursuant to 35 Ill. Adm. Code 218.187(g)(1), testing to demonstrate compliance with the requirements of 35 Ill. Adm. Code 218.187 shall be conducted by the owner or operator within 90 days after a request by the Illinois EPA, or as otherwise specified in 35 Ill. Adm. Code 218.187. Such testing shall be conducted at the expense of the owner or operator and the owner or operator shall notify the Illinois EPA in writing 30 days in advance of conducting the testing to allow the Illinois EPA to be present during the testing;
 - b. Pursuant to 35 Ill. Adm. Code 218.187(g)(2), testing to demonstrate compliance with the VOM content limitations in 35 Ill. Adm. Code 218.187(b)(1), and to determine the VOM content of cleaning solvents and cleaning solutions, shall be conducted as follows:
 - i. The applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) shall be used, provided, however, Method 24 shall be used to demonstrate compliance; or
 - ii. The manufacturer's specifications for VOM content for cleaning solvents may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a), however, Method 24 shall be used to determine compliance. In the event of any inconsistency between a Method 24 test and the manufacturer's specifications, the Method 24 test shall govern;
 - c. Pursuant to 35 Ill. Adm. Code 218.187(g)(3), testing to determine the VOM composite partial vapor pressure of cleaning solvents, cleaning solvent concentrates, and as-used cleaning solutions shall be conducted in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 218.110;
 - d. Pursuant to 35 Ill. Adm. Code 218.404(a), the VOM content of each lithographic coating and ink and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 to establish the records required under 35 Ill. Adm. Code 218.404.
13. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to Section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The

record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

14. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 15a. Pursuant to 35 Ill. Adm. Code 218.187(e)(3), all sources complying with 35 Ill. Adm. Code 218.187 pursuant to the requirements of 35 Ill. Adm. Code 218.187 (b)(1) shall collect and record the following information for each cleaning solution used:
 - i. For each cleaning solution that is prepared at the source with automatic equipment:
 - A. The name and identification of each cleaning solution;
 - B. The VOM content of each cleaning solvent in the cleaning solution;
 - C. Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and a description of changes to the proportion of cleaning solvent and water (or other non-VOM);
 - D. The proportion of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution;
 - E. The VOM content of the as-used cleaning solution, with supporting calculations; and
 - F. A calibration log for the automatic equipment, detailing periodic checks;

- ii. For each batch of cleaning solution that is not prepared at the source with automatic equipment:
 - A. The name and identification of each cleaning solution;
 - B. Date, time of preparation, and each subsequent modification of the batch;
 - C. The VOM content of each cleaning solvent in the cleaning solution;
 - D. The total amount of each cleaning solvent and water (or other non-VOM) used to prepare the as-used cleaning solution; and
 - E. The VOM content of the as-used cleaning solution, with supporting calculations. For cleaning solutions that are not prepared at the site but are used as purchased, the manufacturer's specifications for VOM content may be used if such manufacturer's specifications are based on results of tests of the VOM content conducted in accordance with methods specified in 35 Ill. Adm. Code 218.105(a);
- b. Pursuant to 35 Ill. Adm. Code 218.187(e)(4), all sources complying with 35 Ill. Adm. Code 218.187 pursuant to the requirements of 35 Ill. Adm. Code 218.187 (b)(2) shall collect and record the following information for each cleaning solution used:
 - i. The name and identification of each cleaning solution;
 - ii. Date, time of preparation, and each subsequent modification of the batch;
 - iii. The molecular weight, density, and VOM composite partial vapor pressure of each cleaning solvent, as determined in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 218.110;
 - iv. The total amount of each cleaning solvent used to prepare the as-used cleaning solution; and
 - v. The VOM composite partial vapor pressure of each as-used cleaning solution, as determined in accordance with the applicable methods and procedures specified in 35 Ill. Adm. Code 218.110;
- c. Pursuant to 35 Ill. Adm. Code 218.187(e)(10), all records required by 35 Ill. Adm. Code 218.187(e) shall be retained by the source for at least three years and shall be made available to the Illinois EPA upon request.
- d. Pursuant to 35 Ill. Adm. Code 218.404(b)(2), the owner or operator of a printing line which is exempted from any of the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code

218.402(a) on and after a date consistent with 35 Ill. Adm. Code 218.106, or, for flexographic or rotogravure printing lines that print flexible packaging or that print flexible packaging and non-flexible packaging on the same line, on and after January 1, 2012, the owner or operator of a flexographic and rotogravure printing line referenced in 35 Ill. Adm. Code 218.404(b) shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:

- i. The name and identification number of each coating and ink as applied on each printing line.
 - ii. The VOM content and the volume of each coating and ink as applied each year on each printing line.
- 16a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Records addressing use of good operating practices for the regenerative thermal oxidizer (RTO):
 - A. Records for periodic inspection of the regenerative thermal oxidizer (RTO) with date, individual performing the inspection, and nature of inspection; and
 - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
 - ii. Amount of each material, which contains either VOM or HAP, used on flexographic printing presses with RTO running (tons/month and tons/year);
 - iii. Amount of each material, which contains either VOM or HAP, used on flexographic printing presses without RTO running and all other operations (tons/month and tons/year);
 - iv. VOM and HAP content of each material containing VOM or HAP (% by weight);
 - v. Certified amount of waste shipped-off (tons/month and tons/year) and its VOM content (% by weight);
 - vi. Natural gas usage of the heaters, dryers, and the regenerative thermal oxidizer (RTO) (mmscf/month and mmscf/year); and
 - vii. Monthly and annual emissions of CO, NO_x, PM, SO₂, VOM and HAPs from the source with supporting calculations (tons/month and tons/year).
- b. All records and logs required by Condition 16(a) of this permit shall be retained at a readily accessible location at the source for at least

five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

17. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- 18a. Pursuant to 35 Ill. Adm. Code 218.187(e)(2)(B), all sources subject to the requirements of 35 Ill. Adm. Code 218.187 shall at least 30 calendar days before changing the method of compliance between 35 Ill. Adm. Code 218.187(b)(1), (b)(2), (b)(4), or (b)(5) and 35 Ill. Adm. Code 218.187(b)(3), notify the Illinois EPA in writing of such change. The notification shall include a demonstration of compliance with the newly applicable subsection;
- b. Pursuant to 35 Ill. Adm. Code 218.187(e)(9), all sources subject to the requirements of 35 Ill. Adm. Code 218.187(b) and (d) shall notify the Illinois EPA of any violation of 35 Ill. Adm. Code 218.187(b) or (d) by providing a description of the violation and copies of records documenting the violation to the Illinois EPA within 30 days following the occurrence of the violation.
- c. Pursuant to 35 Ill. Adm. Code 218.404(b)(3), any owner or operator of a printing line which is exempted from the any of limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402(a) on and after a date consistent with 35 Ill. Adm. Code 218.106, or, for flexographic or rotogravure printing lines that print flexible packaging or that print flexible packaging and non-flexible packaging on the same line, on and after January 1, 2012, the owner or operator of a flexographic and rotogravure printing line exempted from the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402(a) shall notify the Illinois EPA of any record showing that total maximum theoretical emissions of VOM from all printing lines exceed 90.7 Mg (100 tons) in any calendar year before the application of capture systems and control devices, or that the combined potential to emit of all flexographic and rotogravure printing lines at the source equals or exceeds 22.7 Mg (25 tons) of VOM in any calendar year, by sending a copy of such record to the Illinois EPA within 30 days after the exceedance occurs.
- d. Pursuant to 35 Ill. Adm. Code 218.404(g)(2), any owner or operator of a printing line subject to the limitations of 35 Ill. Adm. Code 218.401(d) shall Notify the Illinois EPA of any violation of 35 Ill.

Adm. Code 218.401(d) by sending a description of the violation and copies of records documenting such violations to the Illinois EPA within 30 days following the occurrence of the violation.

- e. Pursuant to 35 Ill. Adm. Code 218.990, upon request by the Illinois EPA, the owner or operator of an emission unit which is exempt from the requirements of 35 Ill. Adm. Code Part 218 Subparts PP, QQ, RR, TT or 35 Ill. Adm. Code 218.208(b) shall submit records to the Illinois EPA within 30 calendar days from the date of the request that document that the emission unit is exempt from those requirements.
- 19a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.
- b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

It should be noted that this permit has been revised so as to include operation of the equipment described in construction permit 13080022.

If you have any questions on this, please call Valeriy Brodsky at 217/785-1705.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

REP:VJB:jws

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the packaging printing facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels (e.g., 10 tons/year for any single HAP and 25 tons/year for any combination of such HAPs) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

<u>Emission Unit</u>	<u>E M I S S I O N S (tons/year)</u>					<u>Single</u>	<u>Combined</u>
	<u>CO</u>	<u>NO_x</u>	<u>PM</u>	<u>SO₂</u>	<u>VOM</u>	<u>HAP</u>	<u>HAP</u>
21 Flexographic Printing Presses					14.00		
33 Silk Screen Printing Presses					8.74		
Hot Stamp Printing					0.44		
Color Vista Process			0.44		0.44		
Heaters and Dryers	6.81	8.10	0.62	0.05	0.45	--	--
Total	6.81	8.10	1.06	0.05	24.07	9.0	22.5